IN THE CLAIMS:

This listing of claims will replace all prior versions and listings of claims in the application.

Listing of Claims:

1. (Currently Amended) A method for rapidly isolating genomic DNA from a nucleic acid source comprising the steps of:

a) lysing the nucleic acid source,

b) filtering the lysate through a porous matrix consisting of a material based on silica or of a silica coated material to bind the nucleic acid directly to the porous matrix in the absence of an alcohol and in the absence of a chaotropic salt, and

c) eluting the nucleic acid from the porous matrix of step b) ~~by using~~with an aqueous buffer solution to provide the isolated genomic DNA.

2. (Canceled).

3. (Canceled).

4. (Previously presented) The method according to claim 1, wherein the genomic DNA is of a size ranging from about 10 kbp to about 50 kbp.

5. (Previously presented) The method according to claim 1, wherein the nucleic acid source is a biological tissue or cell material.

6. (Previously presented) The method according to claim 5, wherein the nucleic acid source is at least one selected from the group consisting of:

mammalian cells, organs, biopsy material, blood, serum, muscle, bone marrow, bacteria, yeast, plant tissue and cells.

7. (Previously presented) The method according to claim 1, wherein the nucleic acid source is lysed using a buffer not containing a chaotropic salt and not containing an alcohol.

8. (Previously presented) The method according to claim 1, wherein at least one selected from the group consisting of a RNase, a protease and a lysozyme is added to one or more of the steps of claim 1.

9. (Previously presented) The method according to claim 1, wherein the porous matrix comprises a siliceous oxide coated surface.

10. (Previously presented) The method according to claim 1, wherein the porous matrix is a porous silica membrane.

11. (Previously presented) The method according to claim 1, wherein the porous matrix comprises pores having a size ranging from 0.2 μm to 3.2 μm.

12. (Previously presented) The method according to claim 11, wherein the porous matrix comprises pores having a size ranging from 0.3 μm to 2.8 μm.

13. (Previously presented) The method according to claim 12, wherein the porous matrix comprises pores having a size ranging from 0.5 μm to 2.0 μm.

14. (Previously presented) The method according to claim 1, further comprising a step wherein the isolated genomic DNA serves as a template in a subsequent application.

15. (Previously presented) The method according to claim 14, wherein the subsequent application is PCR or quantitative real time PCR.

16. (Previously presented) The method according to claim 1, wherein the lysate is centrifuged to eliminate cell debris prior to step b) .

17. (Previously presented) The method according to claim 1, wherein one or more washing steps are performed subsequent to step b) and prior to step c) .

18. (Previously presented) The method according to claim 17, wherein the one or more washing step is performed using a washing buffer.

19. (Previously presented) The method according to claim 1, wherein the porous matrix of step b) is a membrane embedded in a single column filter tube.

20. (Previously presented) The method according to claim 1, wherein the porous matrix of step b) is a membrane integrated in a multi-well filter plate.

21. (Previously presented) The method according to claim 19, wherein the membrane is assembled in one or more layers.

22. (Previously presented) The method according to claim 21, wherein the membrane comprises multiple membrane layers and each of the layers of the membrane have pores of different sizes relative to the other layers .

23. (Canceled).